THE REHABILITATION OF THE COCONUT INDUSTRY

ACREAGE UNDER COCONUT IN CEYLON

The last complete Agricultural Census of Ceylon was taken in 1946. The area under coconut cultivation in the Island at that time was 1,070,942 acres. There has been practically no new-planting of coconut since 1946, and the total area under coconut cultivation today is still in the region of 1.1 million acres.

In fact, there has been no significant change in the total area under coconut in Ceylon during the last twenty five or thirty years. The area reported to be under coconut at the 1929 Census was practically the same (1,076,222 acres) as the figure reported at the 1946 Census.

Why did the opening up of new land under coconut practically come to a standstill about the year 1930 after a period of almost continuous expansion over the previous sixty or seventy years ? The low prices fetched by coconut products during the nineteen-thirties and the dislocation caused by the Second World War were, of course, contributory causes. They do not however provide a complete answer. In other countries where the same causes operated, there was a steady expansion of coconut cultivation during the same period. In the Philippines, for example, which is the world's largest producer of coconut products, the area under coconut cultivation more than doubled in the quarter-century between 1930 and 1955: and now stands at nearly 3 million acres. The principal reason why there was no corresponding expansion in Ceylon was the fundamental change of the Island's land policy which was made in the early nineteen-thirties on the recommendation of the 1929 Land Commission. Under the Government's new land policy Crown land was no longer alienated to private capitalists for the expansion of plantation agriculture. Crown land was reserved almost exclusively for alienation to small-scale peasant cultivators. This new land policy, which was embodied in statutory form in the Land Development Ordinance of 1935, brought to an almost complete standstill the expansion of plantation agriculture in Ceylon.

Even if the new land policy adopted by the Government in the early nineteen-thirties had not brought the expansion of the Ceylon coconut industry to a complete standstill, the rate of expansion after 1930 would

have been considerably slower than it had been in the previous 60 or 70 years. This would inevitably have been so because the total area of land suitable for coconut cultivation which was still available for development, was limited. It is difficult to state precisely what area of new land is still available for planting in coconut, but it is the consensus of expert opinion that the area is not large. This was the view expressed by the Ceylon Coconut Commission in its report (Sessional Paper No. XII of 1949). The Commission did not however attempt to make an estimate of the actual acreage likely to be available. Such an estimate was made by the Crown Lands Utilisation Committee which in its Report (Sessional Paper No. III of 1953) placed the total area still available for development under coconut at 130,000 acres — a little more than 10 per cent of the present acreage under the crop. If this entire acreage is opened up in coconut, the resulting increase in production would, at present yield-levels, not even meet the increased local demand resulting from the increase in population over the next ten years. If therefore, we are to meet the steadily increasing local demand for coconuts and at the same time to maintain (and if possible expand) our exports of coconut produce, then it is absolutely essential that we should take steps to increase substantially the productivity of the land already planted in coconuts. An increase in yields, therefore, rather than a substantial extension of acreage, should be the goal of the coconut industry in the next few years. The purpose of this Report is to see what steps we can take to achieve this goal.

Production of Coconuts in Ceylon

Unlike in the case of the tea and rubber industries, reliable statistics of production of coconut in Ceylon are not available. Production statistics are usually compiled by adding to the export figures (which are known accurately) estimated figures for the local consumption.

Estimates of the local consumption of coconuts per head of population have been made at different times and on various different assumptions. The resulting final figures have, however, been remarkably close. Rutherford made an assessment of domestic consumption in 1919 and arrived at a figure of between 130 and 145 nuts per head per annum. The family Budget Surveys of 1950 placed the figure at 124 nuts per adult per annum. The 1953 Survey of Consumer Finances placed the consumption at 115 nuts per head per year. For the purposes of this Report, we have taken the 1950 Budget Survey figure of 124 nuts per adult per year for computing the local consumption of coconuts.

The productivity of a coconut plantation in a particular year is closely co-related to the total rainfall and the total number of wet days in the previous year. In studying production trends in the coconut industry

therefore, it can be quite misleading to take the figures for individual years. In order to iron out the vagaries of the weather, it is necessary to take the average annual production over (say) 4 year periods. The following table gives the figures of estimated local consumption, exports and total production of coconuts in Ceylon since 1931:—

Period	*Average Annual Local Consumption (Domestic and Industrial) Millions of Nuts*	*Average Annual Exports*	*Average Annual Production (Total)*
	Millions of Nuts	*Millions of Nuts*	*Millions of Nuts*
1931-34	559	1,075	1,674
1935-38	630	1,006	1,636
1939-42	669	846	1,515
1943-46	731	907	1,638
1947-50	829	887	1,716
1951-54	935	1,296	2,231
1955-57 (three year period)	1,065	1,311	2,376

Note:—(i) All figures have been given after the conversion into the nut equivalent. The following conversion factors have been used:—

	Nuts
1 ton coconut oil	8,125
1 ton copra	5,000
1 ton desiccated coconut	6,900

(ii) The figures given above for the years prior to 1954 are based on the statistics contained in the Census Department's Report on 'Coconut Plantations' published in 1956. The figures for the years 1955 to 1957 are calculated on the same basis as in this publication.

The figures in the above table show that the annual production of coconuts in the Island remained practically constant in the twenty year period from 1931 to 1950, but that after 1950 there was a sharp and substantial increase in production. This increase is easily accounted for. During the nineteen-thirties, coconut prices were depressed and coconut owners had little money to spare for the purchase of fertilizer and the adoption of improved cultivation methods. During and immediately after the Second World War, although coconut products were fetching relatively good prices, there was a world-wide shortage of fertilizers and the Ceylon coconut industry, like all other agricultural industries, suffered as a result.

After about 1950, fertilizers were again freely available and the boom prices fetched by coconut products during and after the Korean War enabled the owners of coconut lands to adopt improved agricultural, methods. They buried their husks instead of selling them, they weeded, drained, ploughed, and harrowed their lands. The results were reflected in the marked improvement in the productivity of the coconut industry after 1950 which is shown in the table above.

Target Figure for Increased Coconut Production.

The Working Group on the Development of the Coconut Industry appointed by the National Planning Council has expressed the view that, over the next 10 to 15 years, the average yield per acre of the coconut industry could be raised by 50 per cent, from the present average of about 2,000 nuts per acre to an average of at least 3,000 nuts per acre. (The Report of this Working Group was published in 1957 in the First Interim Report of the National Planning Council).

The writer of the present Report was a member of the Working Group, referred to above. I agreed, at that time, with the Working Group's target of a 50 per cent, increase in coconut production, but in the light of figures I have since seen of the yields of replanted coconut lands, I feel now that the target was over optimistic. The Working Group's target was based on the expectation that the average yield of replanted coconut lands in full bearing would be about 4,000 nuts per acre per year. While it is quite feasible that in good years, in which weather conditions are favourable, yields of 4,000 nuts per acre or more will be secured, it is doubtful whether an average yield of 4,000 nuts per acre will be maintained over a period of years, particularly under small-holding conditions. It must be borne in mind that, unlike in the rubber and tea industries, our research scientists have not yet developed high-yielding varieties of 'clonal' planting material for the coconut industry. It is not possible therefore to achieve the spectacular increases in yields which are possible as a result of replanting in the rubber and tea industries.

My own view is that over the next 10 or 12 years (say by 1970), it should be possible to increase the average yields of our coconut lands by about 30 per cent, representing a total increase of about 600 million nuts per year. (The details of how this figure is arrived at are given later in this report). When this increase is added to the present production of about 2,300 million nuts per year, the total production of coconuts in 1970 should be in the region of 3,000 million nuts.

Estimated Future local requirements of Coconuts.

Of the proposed increase in production of approximately 700 million nuts a year, what quantity will be taken up by increased local consumption and what quantity will be available for export?

The local consumption of coconuts in 1957 is estimated at 1,065 million nuts (of which about 1,025 million represents domestic consumption while the balance 40 million represents industrial use of coconut oil, principally for local soap manufacture). The domestic consumption is based on a 1957 population of 9.1 million.

There have been various projections made recently of the future population of Ceylon. Dr. N.K. Sarkar in his treatise on the 'Demography of Ceylon' published in 1957 estimated, on the basis of certain assumptions regarding future fertility and mortality rates, that Ceylon's population in 1971 would be 11.5 million. The Registrar General's Department has made two projections of the future population — a High-projection based on certain assumptions regarding fertility and mortality trends, which places the population at 13.4 million in 1970, and a Low-projection based on certain other assumptions which places the population in 1970 at 12.4 million. These figures are both much higher than Dr. Sarkar's estimate.

For the purpose of this Report, we can take a rough figure of 12½ million as the population of Ceylon in 1970. This represents an increase of roughly 40 per cent over the 1957 population. A proportionate increase in the local consumption of coconuts would require about 400 million extra nuts each year.

In other words, a little more than half the increase in coconut production which we expect to achieve by 1970 will be absorbed in meeting the increased local demand, while the balance (300 million nuts) will be available for export with a resultant increase in our total exports of coconut products of approximately 25 per cent.

First Report of the Ministry Planning Committee, pages 111-114.

(*Agricultural Plan of the Ministry of Agriculture*).